

U.S. Appl. No. 09/885,705
Amendment Dated April 26, 2005
Reply to Office Action of February 14, 2005
Docket No. 6165-243

IBM Docket No.: BOC9-2001-0003

REMARKS/ARGUMENTS

These remarks are submitted responsive to the final Office Action of February 14, 2005 (Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due. To expedite prosecution, this response is filed as a Request for Continued Examination (RCE).

In paragraphs 5-6, the Examiner has rejected claim 11 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2003/0069908 to Anthony, *et al.* (Anthony). In paragraphs 7-8, the Examiner has rejected claims 1-3, 5-6, 16-18, and 20-21 under 35 U.S.C. § 103(a) as being unpatentable over Anthony in view of U.S. Patent Publication No. 2002/0016828, to Daugherty, *et al.* (Daugherty). In paragraph 9, the Examiner has rejected claims 4 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Anthony in view of Daugherty, in further view of "Understanding UML The Developer's Guide with a Web-Based Application in Java", Harmon, *et al.*, Morgan Kaufmann Publishers, Inc. 1998, pp. 214-253 (Harmon). In paragraph 10, the Examiner rejected claims 7-8 and 10 under Anthony in view of "Laura Lemay's Web Workshop JavaScript", Lemay, *et al.*, Sams, 1996, pp. 7-9 (Lemay). In paragraph 11, the Examiner rejected claims 9 and 14-15 under 35 U.S.C. § 103(a) as being unpatentable over Anthony in view of Lemay and in further view of Harmon. In paragraph 13, the Examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Anthony in view of Harmon.

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Before turning to the amendments to the claims, Applicant will take a moment to explain state chart diagrams. Many different software models and tools exist for modeling software (background page 1, lines 6-10). State chart diagrams (claimed) and class diagrams (Anthony) are two different types of diagrams that software developers situationally utilize. Applicant has referenced a number of Web sites for the convenience of the Examiner, each providing an overview of what is meant by a state chart diagram within computer science. Note, there is nothing special about any of these references, and any Web site or computer science reference book can be accessed for similar teachings.

(1) <http://www.developer.com/design/article.php/2238131>

(2) <http://www-128.ibm.com/developerworks/rational/library/769.html>

(3) <http://www.agilemodeling.com/artifacts/stateMachineDiagram.htm>

(4) http://pigseye.kennesaw.edu/~dbraun/csis4650/A&D/UML_tutorial/state.htm

(5) http://www.raba.com/~jcstaff/oodev/presents/uml/intro_uml/sld120.htm

From the first (1) Web site, *"State diagrams (also called State Chart diagrams) are used to help the developer better understand any complex/unusual functionalities or business flows of specialized areas of the system. In short, State diagrams depict the dynamic behavior of the entire system, or a sub-system, or even a single object in a system. This is done with the help of Behavioral elements."* A similar definition has been provided on page 1, lines 5-14 of the Applicant's specification and was provided in the remarks to the previous Office Action.

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The Examiner's provided reasoning that Anthony teaches state diagrams because Anthony utilizes class names, such as clothing, instances, solid and dashed lines, is not clear to the Applicant and appears to be contradictory to accepted teachings in the art. Specifically, Applicant directs the Examiner to the discussions of class diagrams and state chart diagrams contained within the second (2) Web site.

Applicant also refers the Examiner to the second (2) Web site for the standardized conventions used within state chart diagrams. *"As shown in Figure 5, the notation set of the statechart diagram has five basic elements: the initial starting point, which is drawn using a solid circle; a transition between states, which is drawn using a line with an open arrowhead; a state, which is drawn using a rectangle with rounded corners; a decision point, which is drawn as an open circle; and one or more termination points, which are drawn using a circle with a solid circle inside it. To draw a statechart diagram, begin with a starting point and a transition line pointing to the initial state of the class. Draw the states themselves anywhere on the diagram, and then simply connect them using the state transition lines."* Considering the above paragraph together with page 1, lines 15-27, it is clear that Applicant's conventions follow the standards for state chart diagrams, which are fundamentally different than those for class diagrams (See <http://www.agilemodeling.com/artifacts/classDiagram.htm>, hereafter Web Site (6), for a class diagram overview). Comparing these teachings to Anthony, it is clear that Anthony's teachings are specific teachings for class diagrams teachings.

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Turning to the amendments of claims, Applicant has amended claims 1, 7, 11, 14, and 16 to clarify the meanings of state chart diagram, state chart data, and state transition data. These amendments are consistent with conventional computer science definitions for the terms, which can be confirmed by comparing the amendment definitions with the referenced Web sites.

More specifically, the claims have been amended to clarify that state chart diagrams specify behavior for a plurality of objects, that state chart data specifies life-cycle states possible for each object and behavior exhibited by said objects for each specified state, and that state transition data specifies event occurrences for transitioning from one state to another. In addition to being supported by conventional computer science definitions for these terms, these claim amendments are supported by page 1, lines 6-14 and page 1, lines 20-21, and throughout the Applicant's specification. No new matter results from the claim amendments.

Having made the above amendments and having provided references supporting definitions for state chart diagrams and class diagrams, Applicant reasserts his previous remarks. That is, Applicant respectfully incorporates his previous remarks to be reviewed in light of the present claim amendments. These previous remarks were not fully addressed as the Examiner stated that the claims failed to support the Applicant's previous arguments.

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To summarize these remarks, Anthony provides teachings regarding class diagrams, and is silent regarding state diagrams. Anthony fails to teach modeling behavior exhibited by objects or lifecycle states for the objects and behavior exhibited by the objects at the specified states, which is claimed by the Applicant. Anthony teaches a different type of software modeling. Anthony is non-analogous art.

Class names and class instances from Anthony are different from state chart names and transition data (Applicant again refers the Examiner to the referenced Web sites and teachings contained therein, which represents teachings held by one of ordinary skill in the art). Parsing arrows (Anthony) is dissimilar to parsing composite state actions – which is apparent from comparing the generic state diagram teachings from Web site (3) with the generic class diagram teachings from referenced Web site (6). The translator of Anthony is not analogous to the claimed state machine modeling tool. For more complete reasoning regarding these differences, see the previous reply to office action dated October 28, 2004.

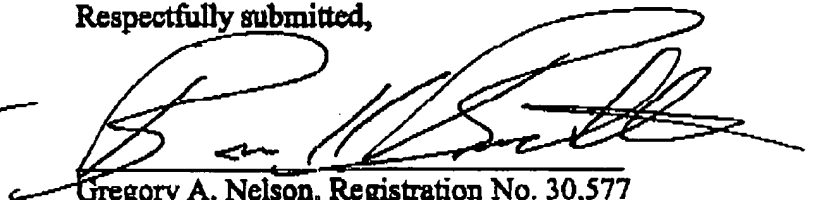
The other references (Daugherty, Harmon, Lemay) also lack teachings relating to state chart diagrams, and individually and collectively fail to cure the deficiencies of Anthony. Since Anthony, Daugherty, Harmon, Lemay, and combinations thereof fail to explicitly, inherently, or implicitly teach or suggest the Applicant's claimed invention, the 35 U.S.C. § 102 and § 103 rejections to claims 1-21 should be withdrawn, which action is respectfully requested.

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Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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